


# Bushings for Locating Pins (Flanged)

Standard / Thin Wall

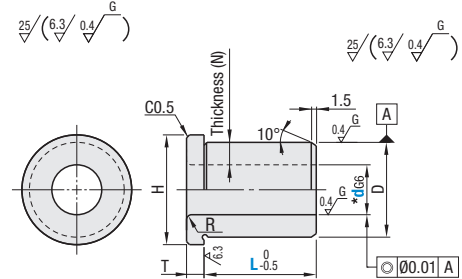
**Standard Type**



RoHS 10

Type		Material	Surface Treatment	Hardness
p6	m6			
JBH	JBHM	O1 Tool Steel or Equivalent	—	60 HRC min.
JBHN	JBHMN			
JBHC	JBHMC	440C or 420 Stainless Steel	—	50 HRC min.


Ⓢ Tolerance of d dimension 2-6 of electroless nickel plated products is H7.  
 Ⓢ For hole machining, please note that inner diameter shrinkage of p6 Type is larger than that of m6 Type.  
 (See "Variance of Inner Diameter after Press-fit of Bushings for Locating Pins" on P.1680.)



Type	d	D Tolerance		L Selection	Thickness (N)	R	H	T	D	D Tolerance		Compliance with Standard		
		No Surface Treatment	Electroless Nickel Plating							p6	m6	JBH	JBHM	JBHC
													JBHM	JBHMN
(p6)	2	+0.008	+0.010	5 6 8 10 12	1.5	0.8	9	2.5	5	+0.020	+0.012	•	•	•
	3	+0.002	0	5 6 8 *10 12	2					+0.012	+0.004	•	•	•
	4	+0.012	+0.012	*5 6 8 10 12 15 *16 20	2					+0.024	+0.015	•	•	•
	5			5 6 8 10 12 15 16 20	2.5					+0.015	+0.006	•	•	•
	6	+0.004	0	5 6 8 10 12 15 16 20 25	2					+0.029	+0.018	•	•	•
(m6)	10	+0.014	+0.014	6 8 10 12 15 16 20 25	2.5	1	14	3	10	+0.018	+0.007	•	•	•
	12	+0.005	+0.005	8 10 12 15 16 20 25 30	3					+0.022	+0.008	•	•	•
	13	+0.017	+0.017	10 12 15 16 20 25 30	4.5					+0.035	+0.021	•	•	•
	15	+0.006	+0.006	10 *12 *15 *16 *20 *25 *30	5					+0.042	+0.025	•	•	•
	16	+0.020	+0.020	12 15 16 20 25 30	5					+0.026	+0.009	•	•	•
	20			12 15 16 20 25 30	5					+0.026	+0.009	•	•	•
	25	+0.007	+0.007	16 20 25 *30 35	5					+0.042	+0.025	•	•	•

Ⓢ L dimension with \* is not applicable to JBHMC.

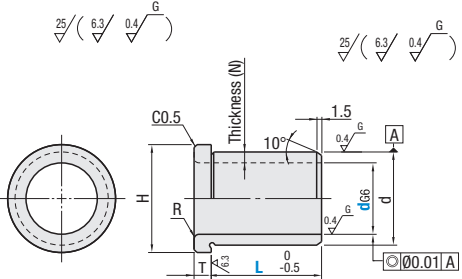
**Thin Wall**



RoHS 10

Type		Material	Surface Treatment	Hardness
p6	m6			
JBHUP	JBHU	52100 Bearing Steel or O1 Tool Steel or Equivalent	—	58 HRC min.
JBHUNP	JBHUN			
JBHUCP	JBHUC	440C or 420 Stainless Steel	—	50-55 HRC min.

Ⓢ Tolerance of d dimension 3-6 of electroless nickel plated products is H7.  
 Ⓢ For hole machining, please note that inner diameter shrinkage of p6 Type is larger than that of m6 Type.  
 (See "Variance of Inner Diameter after Press-fit of Bushings for Locating Pins" on P.1680.)



Type	d	D Tolerance		L Selection	Thickness (N)	R	H	T	D	D Tolerance		Compliance with Standard		
		No Surface Treatment	Electroless Nickel Plating							p6	m6	JBHU	JBHUN	JBHUC
													JBHUP	JBHUNP
(p6)	3	+0.008	+0.010	6 8 10 12	1	0.5	9	2.5	5	+0.020	+0.012	•	•	•
	4	+0.002	0	6 8 10 12 15 16						+0.012	+0.004	•	•	•
	5	+0.012	+0.012	6 8 10 12 *15 *16 20						+0.024	+0.015	•	•	•
	6	+0.004	0	6 8 10 12 *15 16 20						+0.015	+0.006	•	•	•
	8	+0.014	+0.014	6 8 10 12 15 16 20						+0.029	+0.018	•	•	•
(m6)	10	+0.005	+0.005	6 8 10 12 15 16 20	1.5	1	14	3	10	+0.018	+0.007	•	•	•
	12	+0.017	+0.017	8 10 12 15 16 *20	+0.022					+0.008	•	•	•	
	13			10 12 15 16 20	+0.035					+0.021	•	•	•	
	15	+0.006	+0.006	12 15 16 20	2					+0.042	+0.025	•	•	•
	16	+0.020	+0.020	12 15 16 20 *25	2.5					+0.026	+0.009	•	•	•
	20			12 15 16 20 25	2.5					+0.026	+0.009	•	•	•
	25	+0.007	+0.007	20 25	3					+0.042	+0.025	•	•	•

Ⓢ L dimension with \* is not applicable to JBHUC.

Ⓢ d13 value unavailable for parts JBHUC, JBHUCP


Part Number Example

Part Number	-	L
JBH5	-	8
JBHUN12	-	12

# Bushings for Locating Pins (Flanged Configurable)

Standard / Thin Wall

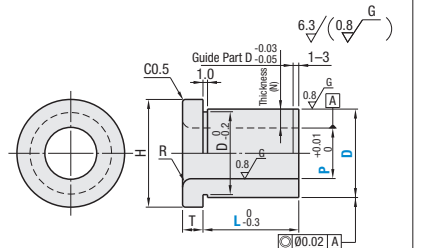
**Standard Type**



RoHS 10

Type		Material	Surface Treatment	Hardness
p6	m6			
JBHFP	JBHF	O1 Tool Steel or Equivalent	—	56-60 HRC min.
JBHFBP	JBHFB			
JBHFMP	JBHFM	440C or 420 Stainless Steel	Electroless Nickel Plating	56-60 HRC min.
JBHFSP	JBHFS			
JBHFPC	JBHFC	—	—	50-55 HRC min.


Ⓢ For hole machining, please note that inner diameter shrinkage of p6 Type is larger than that of m6 Type.  
 (See "Variance of Inner Diameter after Press-fitting Bushings for Locating Pins" on P.1680.)



Type	D	D Tolerance		P 0.01 mm Increment	L 0.1 mm Increment	Thickness (N)	R	H	T
		p6	m6						
(p6)	5	+0.020	+0.012	2.20-2.50	3.0-3.5	1.25-1.50	0.8	9	2.5
	7	+0.024	+0.015	2.20-3.50	3.0-6.0				
	8	+0.015	+0.006	3.00-4.50	3.0-10.0				
	10	+0.029	+0.018	4.00-6.50	3.0-15.0				
	12			6.00-8.50					
(m6)	15	+0.018	+0.007	8.00-10.50	10.0-35.0	2.25-3.50	2.0	26	5
	18			10.00-12.50		2.75-4.00			
	20	12.00-13.50	3.25-4.00						
	22	12.00-13.50	4.25-5.00						
	25	+0.035	+0.021	13.00-15.50		4.75-6.00			
	26	+0.022	+0.008	15.00-16.50		4.75-5.50			
	30	+0.042	+0.025	16.00-20.50		4.75-7.00			
	35			20.00-25.00		5.00-7.50			

Ⓢ L+T≤Px2.5 when P≤3.59 L+T≤Px3.0 when P≥3.60

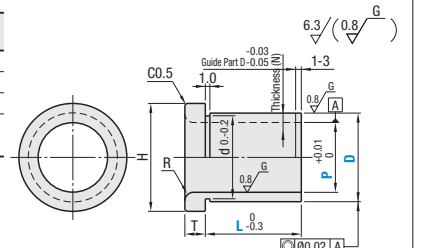
**Thin Wall**



RoHS 10

Type		Material	Surface Treatment	Hardness
p6	m6			
JBHUF	JBHUF	JIS SKS93	—	56-60 HRC min.
JBHUFBP	JBHUFB			
JBHUFMP	JBHUFM	440C or 420 Stainless Steel	Electroless Nickel Plating	56-60 HRC min.
JBHUFSP	JBHUF			

Ⓢ For hole machining, please note that inner diameter shrinkage of p6 Type is larger than that of m6 Type.  
 (See "Variance of Inner Diameter after Press-fit of Bushings for Locating Pins" on P.1680.)



Type	D	D Tolerance		P 0.01 mm Increment	L 0.1 mm Increment	Thickness (N)	R	H	T					
		p6	m6											
(p6)	7	+0.024	+0.015	3.51-5.00	3.0-6.0	1.00-1.74	0.5	11	2.5					
	8			4.51-6.00	3.0-10.0									
	9	+0.015	+0.006	4.51-6.50	3.0-15.0					1.25-2.24				
	10	+0.029	+0.018	6.51-8.00						1.00-1.74				
	11			8.00-9.00	1.00-1.50									
	(m6)	12	+0.018	+0.007	8.51-9.00					10.0-35.0	1.50-1.74	1.0	26	5
		13			8.51-10.00						1.50-2.24			
		14	9.00-11.00	1.50-2.50										
		15	10.51-12.00	1.50-2.24										
		17	10.51-13.00	2.00-3.24										
18		12.51-14.00	2.00-2.74											
20		+0.035	+0.021	13.51-15.00	2.50-3.24									
22		+0.022	+0.008	13.51-17.00	2.50-4.24									
25		+0.042	+0.025	15.51-19.00	3.00-4.74									
26				16.51-20.00	3.00-4.74									
30	20.51-24.00	3.00-4.74												
35	+0.026	+0.009	25.01-29.00	12.0-50.0	3.00-4.99									

Ⓢ L+T≤Px2.5 when P≤3.59 L+T≤Px3.0 when P≥3.60

Part Number Example

Part Number	-	P	-	L
JBHFM25	-	P14.00	-	L20.0
JBHUFM15	-	P11.00	-	L20.0

Part Number Alterations

Part Number	-	P	-	L	-	(RC, TC)
JBHFM12	-	P8.00	-	L12.0	-	RC

Alterations	Code	Spec.
Inner Diameter Radius R	RC	Machines Radius R on both sides. Thickness 1.5 mm or more Size of R will be the same as R on shoulder side with D dimension 10 or more. Ordering Code: RC
Shoulder Thickness	TC	1 mm Increment Ordering Code: TC4 3≤TC≤T Ⓢ O.A.L. becomes short as much as T-TC. Ⓢ Applicable when D≥12.